XVI. PRELIMINARY NOTE ON A NEW GENUS OF ONYCHOPHORA FROM THE N.E. FRONTIER OF INDIA.

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The discovery of a species of Peripatus in the Abor country during the military expedition of 1911-12 is of interest in that it is the first occasion on which a member of the group has been found within the limits of the Indian Empire. The form proves to belong to a genus and species hitherto undescribed and, inasmuch as some time must still elapse before the complete account can be published,¹ I have thought it advisable to give a brief preliminary account of its more important characters.

The main features of the different geographical groups or genera of Onychophora have been clearly stated by the late Prof. Sedgwick,² and in the preparation of this note I have followed the lines which he has adopted in his definitions.

Typhloperipatus williamsoni, gen. et sp. nov.

The species is blind and on external examination no trace of the eyes can be found The ocular lobe is well developed but is provided with a rudimentary nerve. A loosely compacted irregular and non-cellular structure found within the lobe appears to represent the remains of retinal rods, but no trace of any other visual structure remains.

The legs vary in number from 19 to 20; in adult specimens there seem to be invariably 19 in the male and 20 in the female.

The outer jaw is provided with two, less commonly with three minor teeth; the inner has three minor teeth and a series of eight or ten small denticles separated from the others by a short diastema.

The legs have four spinous pads and in the fourth and fifth pairs the nephridial openings are situated on the third pad. The feet bear two distal papillae, one anterior and one posterior.

The genital opening, in both sexes, is situated between the legs of the penultimate pair.

In the female the ovaries are fused, but there does not appear to be any communication between the oviducts. Receptacula ovorum do not appear to exist, but large receptacula seminis are present, each communicating with the oviduct by means of two

¹ A detailed description with figures will be published in Vol. VIII of the Records of the Indian Museum.

² Sedgwick, Quart. Journ. Microsc. Sci., LII, p. 379 (1908).

ducts. The ovary is exogenous. The ova are large and heavily charged with yolk and measure from 1.5 to 2 mm. in their longest diameter. The uterine embryos are of all ages and do not possess a trophic vesicle.

In the male the testes are tubular; the vesiculae seminales are of very large size and occupy the greater part of the bodycavity between the tenth and thirteenth pairs of legs. The unpaired part of the vas defereus is of enormous length, reaching in one specimen as far as the fifth leg, in another to the interspace between the seventh and eighth pairs. The spermatophore is very long and is provided with a horny cap in front. The accessory glands of the male consist of convoluted tubes which open separately in front of the anus. Of crural glands there is a single pair in each of the legs preceding the genital opening.

The skin pigment is slowly extracted by alcohol. Living specimens were dorsally of a deep raw umber brown colour with the ends of the autennae and the tips of some of the primary tubercles pale buff. Ventrally the animal was entirely pale.

The specimens were all found in the vicinity of Rotung, on the banks of the Dihang river, living under stones at altitudes varying from 1200-2500 feet.
